



# ADVENT

Technologies, LLC

Honey Badger™ & UltraCell™ Fuel Cells

MADE IN THE USA

## SNORKEL WITH XX55 FUEL CELL

PN: ACA0008

### EXTREME COVERT POWER FOR DEMANDING APPLICATIONS

**OPERATIONAL WITH THE XX55 FUEL CELL THIS IS A FULLY SELF-CONTAINED COVERT POWER SOURCE.**

(The XX55 fuel cell sold separately)

The UltraCell Snorkel is an accessory which attaches to an XX55 fuel cell and is capable of operating while being buried. It can deliver continuous and uninterrupted power up to 50 Watts. The Snorkel fuel supply is remote and portable and can be replaced while the system is operating.

The fuel cell is powered by ultra clean, biodegradable methanol, providing quiet, nearly emissions-free operation. It can run continuously off the grid using the existing arsenal of UltraCell fuel cartridges. Its convenient form factor makes it easy for transportation, while its long life means that no servicing trips are needed for highly remote or covert surveillance applications.

The UltraCell Snorkel is ideal for a wide variety of high-power electronic applications including radio and satellite communication gear, remote or mobile surveillance systems, laptop computers, and battery charging.



### FEATURES AND BENEFITS

- ❖ UltraCell Reformed Methanol Fuel Cell (RMFC) technology does not contain materials which are damaged at temperature extremes
- ❖ Only UltraCell's unique RMFC chemistry allows for a single fuel mixture which operates from -30 to +50C unlike other technologies which require desert and winter fuel mixtures
- ❖ Only UltraCell fuel cells can be stored in OFF mode between -30 to +80C without artificial heating unlike other technologies which require complex heating kits for storage below 0C.
- ❖ Only UltraCell fuel cells can startup from a -20C cold soak without additional thermal kits
- ❖ Autonomous operation with sleep mode functionality
- ❖ Safe for indoor and in-vehicle use: Emissions meet OSHA standards
- ❖ Unique hybrid battery system: Delivering 55 Watts of continuous power
- ❖ Internal hybrid BB2590/U battery (sold separately) handles power surges.
- ❖ Industry-leading performance: Operates at high-altitude and cold temperatures
- ❖ Operates anywhere: Quiet, rugged design for jungle, desert, and arctic environments
- ❖ Extended runtime: Hot swappable cartridges and optional long runtime external fuel tanks
- ❖ Simplifies logistics: Powers different devices at different voltages with application-specific tethers
- ❖ Internal hybrid BB2590/U battery (sold separately) handles power surges.

# SNORKEL WITH XX55 FUEL CELL

## FUEL CELL SYSTEM

OPERATIONAL MODES	On/Off/Sleep
CONTINUOUS MAX POWER	0 to 50W
OUTPUT VOLTAGE	16.8V Specified at time of order
FUEL COMPOSITION	Methanol and water mixture

## PHYSICAL SPECIFICATIONS

CABLES	Application-specific tethers available (See Accessory Data Sheet)
OUTPUT CONNECTOR	GlenAir Mighty Mouse
DIMENSIONS	Standard Packaging Without Snorkel Attachment: 16.4" x 9.7" x 22.8" (41.7cm x 22.1cm x 57.8cm)
WEIGHT	TBD (does not include hybrid battery)

## ENVIRONMENTAL REQUIREMENTS

OPERATING TEMPERATURE	-22°F to +122°F (-30°C to +50°C)
STARTUP TEMPERATURE	Minimum -4°F (-20°C)
STORAGE TEMPERATURE	-40°F to +140°F (-40°C to +60°C)



Includes all accessories needed for operation



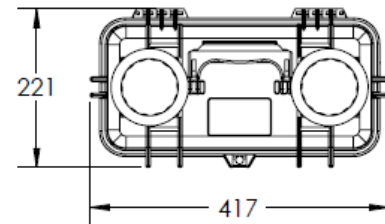
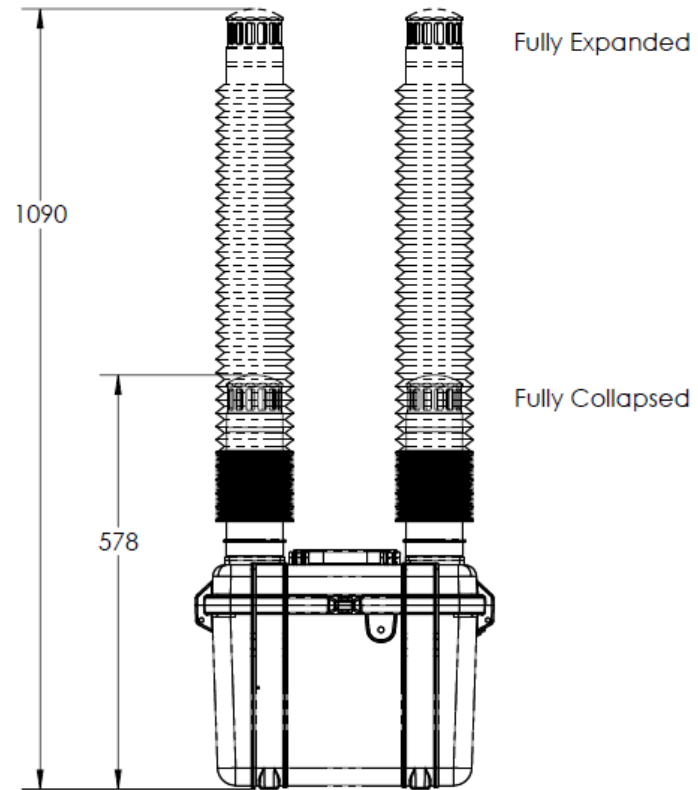
## FUEL OPTIONS

Option	Part Number	Weight	Dimensions	Capacity (Whr)	Runtime (40W)
550cc Cartridge	CR011051	1.4lb (620g)	9.25" x 2.95" x 2.56" (23.50cm x 7.50cm x 6.50cm)	440	11 hours
XRT-75	CR011052	3.0lb (1.4kg)	10.50" x 7.00" x 1.50" (26.25cm x 17.50 x 3.75cm)	1200	30 hours
XRT-200	AC611000	7.9lb (3.6kg)	12.25" x 5.75" x 5.75" (30.63cm x 14.38cm x 14.38cm)	2,500	2.6 days
XRT-400	AC611004	13lb (5.9kg)	13.2" x 9.8" x 7.5" (33.5cm x 24.9cm x 19.0cm)	5,000	5.2 days
XRT-1000	AC611001	37lb (16.8kg)	18.00" x 9.50" x 10.00" (45.00cm x 23.75cm x 25.00cm)	12,500	13 days

A filling station, CliC-it, is available upon request to re-fill cartridges in the field  
UltraCell can assist in sourcing CliC-it certified fuel for onsite refilling



# SNORKEL WITH XX55 FUEL CELL



**ADVENT TECHNOLOGIES, LLC**

5637 La Ribera Street Suite A Livermore CA 94550 USA

Tel: (925) 455-9400 Fax: (925) 455-7750

www.ultracell-llc.com sales@ultracell-llc.com